Claim 1. (Currently Amended) In combination, a tube comprising an inner wall forming a cavity adapted to contain a fluid to be subjected to centrifugation and a separator disk in said tube adapted to separate components of said fluid having different specific gravities, said disk being made of a material having a specific gravity near the specific gravity of red blood cells the components at an interface and comprising a peripheral portion adjacent said inner wall of said tube and a central portion extending across at least a portion of said cavity and having an upper surface, said central portion being configured such that after centrifugation of blood said upper surface lies just below the top of a layer of separated red blood cells.

Claim 2. (Original) A combination according to claim 1 wherein said disk fits into said tube such that a gap is formed between the perimeter of said disk and the interior of said tube, said gap being of such a dimension that the component of said below said disk after separation will not flow through said gap at about 1G.

Claim 3. (Original) A combination according to claim 1 further comprising a shaft extending along said tube and engaging said disk such that said disk slides along said shaft.

Claim 4. (Original) A combination according to claim 1 wherein said disk is arranged to rotate about an axis transverse to the longitudinal axis of said tube to form a valve with the side of said tube during decanting.

Claim 5. (Original) A combination according to claim 4 further comprising a shaft extending along said tube and engaging said disk such that said disk slides along said shaft.

Claim 6. (Original) A combination according to claim 4 wherein said disk includes an upper outer edge and a lower outer edge and the transverse dimension between said upper outer edge and lower outer edge is greater than the internal diameter of said tube.

Claim 7. (Original) A combination according to claim 1 wherein the upper surface is curved.

Claim 8. (Original) A combination according to claim 7 wherein said upper surface is cylindrical.

Claim 9. (Original) A combination according to claim 1 wherein said disk is shaped such that its center of buoyancy is located above an upper surface of the disk.

Claim 10. (Currently Amended) A combination according to claim 9 1 wherein the specific gravity of said disk is such that its-upper-surface will lie said central portion lies just below an interface between plasma and red blood cells.